himself in the school of Antonio Belucci, with whom he continued for three years. From thence he went to Bologna and Rome, where he became the pupil of Carlo Maratti, under whose tuition he made great proficiency. Among his best works are a Nativity, in the church of Santa Maria Mater Domini, at Venice; a Dead Christ in the arms of the Virgin, in a chapel belonging to the church of Santa Germiano, in the same city.

BALISTRARIA. In architecture, a cruciform opening in the walls of a fortress through which crossbowmen discharged their arrows: also the room wherein the *balistris* or *arbalists*, cross-bows, were deposited.

BALFOURIER (Adolphe-Paul-Emile). A modern French landscape painter—a medallist of the second class.

BALLANTYNE. A modern English portrait painter of some reputation.

BALLENBERGER. A genre painter at Frankfort-on-the-Main, who was flourishing in 1839.

BALL-FLOWER. In architecture—an ornament resembling a ball placed in a circular flower—usually found inserted in a hollow moulding, and characteristic of the decorated style of the fourteenth century.

BALMER (George). A landscape painter in water colors, a native of North Shields, in England. His chief works are in Newcastle. He was very successful in marine subjects. He died in the county of Durham in 1846.

BALTEN (Peter). A Dutch landscape and historical painter, born about the year 1540, and died in 1611, aged 71. His most usual subjects were fairs, wakes, conversations, &c. of a small size, but finished with spirit and correctness. One of his most celebrated pictures was a St. John preaching in the Desert, in which he introduced a multitude of auditors, all with one expression, that of looking attentively at the preacher, instead of that variety of feeling and expression a convicted and converting auditory would express. On seeing which the emperor, for whom it was painted, ordered the saint to be expunged, and an elephant to be painted in his place, which gave the effect of astonishment at the novelty and bulk of the animal, in the spectators. The ecclesiastics of the day converted this piece of humor in the emperor to a contempt for religion, when, perhaps, if contempt was intended, it was only for the artist.

BALTHAZARD (Casimir de). A French portrait painter of some distinction—a medallist of the first class.

BALUSTER—in architecture. A small pillar, usually made circular, and swelling towards the bottom.

BAMBOCCIATA, (BUMBOCCIADA, *Ital.* BAMBOCHADE, *Fr.*) Rustic. This term is applied to a class of compositions which represent nature in an every-day rustic and homely manner, embracing the most ordinary actions of life, such as fairs, festivals, &c., and unlike the elevated style of painting, does not abstract from natural accidents and deformities, without seeking to exaggerate the whims of nature—but on the contrary applies itself to represent her *natvely*, and herein the BAMBOCCHIATA ranks higher than compositions of GROTESQUE figures, with which it must not be confounded. This particular style of GENRE painting was practised by Teniers, Van Ostade and Brower, but Peter Van Laar first introduced it into Rome about the year 1626; he, on account of his deformity, was called IL BAMBOCCIO, or the *Cripple*, and fixed his unfortunate *soubriquet* to the style in which he excelled. Painting can only admit of Bambocciata in the same way it does the Grotesque—employing in it only figures of small size. Sculpture absolutely rejects both.

BAND—in architecture. A flat face or fascia, a square moulding, &c., encircling a building or continued along a wall: also the moulding, or suit of mouldings which encircles the pillars and small shafts in Gothic architecture.

BANDINELLI (Bartolomeo). An eminent sculptor and painter, born at Florence in 1487, and died in 1559, aged 72. This artist, who aimed at being painter, sculptor, and architect, because Michael Angelo excelled in each, was after that extraordinary genius, the greatest sculptor of his time; but his works in painting and architecture are of that inferior class, that, in spite of his reiterated endeavors to rival Michael Angelo's versatility of talent, only serve to record his miscarriage in those arts. Bartolomeo, or, as he is better known by the abbreviation Baccio Bandinelli, was the son of Michael Angelo di Viviano da Ganiole, a celebrated goldsmith of Florence, who taught him drawing, and afterwards placed him in the school of Gio. Francesco Rustici, one of the first sculptors of his time. The preference of Baccio for sculpture was soon apparent, and his biographers relate, as a phenomenon, a colossal statue, which, when a boy, he formed in snow, and which for some days attracted the attention of the *cognoscenti*. He afterwards became acquainted with Leonardi da Vinci, and profited much by the friendly advice of that painter; he was also the intimate of Andrea del Sarto. His first great work, a group in marble, of Hercules vanquishing Cacus, established his reputation as a sculptor of the first rank in Italy; but his jealous and envious temper rendered him the enemy of all his rivals, as he was perpetually decrying their works. He is distinguished for his implacable hatred of Michael Angelo, whom, however, he esteemed his inferior, and showed his ill temper in every possible instance, particularly in that circumstance which covers his name with infamy, when by means of a false key he entered the apartments where the cartoons were deposited which that great painter had designed, by order of Pietro Soderrini, for the Grand Council room, and cut them all to pieces. His life was a tissue of intrigue and new projects, abandoned with inconstancy: alike avaricious and presumptuous, he undertook, for the illustrious families of Italy, particularly the Medici, such multitudes of works, that they were mostly left unfinished, or sent home imperfect. Among those works which he did finish, and which embellished the first cities of Italy, and deserve the highest encomiums, are a Mercury playing upon a Flute; which was purchased, in 1539, by Giovanni Battista della Palla, and sent as a present to the King of France; a colossal Hercules, for his native city; a St. Jerome; an Orpheus; Christ taken from the Cross; a St. Peter; a Flagellation of Christ; a fine statue of Cosmo di Medici; some fine works in the church of Santa Maria sopra Minerva, at Rome; and other works in marble or bronze, and the finest copy ever made of the celebrated Laocoon. His last finished work was a Dead Christ. Many that he had begun were finished by different artists. Bandinelli died in a very advanced period of life, leaving an immense fortune to his children. He was buried in a splendid tomb of his own workmanship and design, which he intended for the remains of his father, but a depression of spirits occasioned by this circumstance, terminated his life, so valuable as an artist, but so deplorable as a man. There is a fine picture of Bandinelli in the Napoleon Museum at Paris, by Sebastian del Piombo, where he is represented holding a small bronze statue in his hand, and dressed in black.

BANKS (Thomas R. A.) An English sculptor, born at Lambeth in Surrey, Dec. 22d, 1738, died in 1805. He was originally apprenticed to a wood carver—afterwards admitted as a student by the Royal Academy, and went to Rome. He executed a monument to Sir Eyre Coote, in Westminster Abbey, and to Captains Westcott and Falconer, in St. Paul's.

BAPTIST (John Monnoyer). A celebrated flower painter, born at Lisle, in 1635, and died in 1699. He was educated at Antwerp. His flowers have a remarkable freedom and looseness, as well in the disposition as in coloring. The Duke of Montague invited him to England, and employed him to embellish his house, which is now the British Museum. A celebrated work by him is a looking-glass, decorated by him in the palace at Kensington. He also painted birds on vellum.

BAPTISTERY—in architecture. Sometimes a separate building, sometimes the part of the church in which baptism uas performed by immersion.

HELIOCHROMY.

To us, with our limited comprehension in matters of science, the discovery of the Daguerreotype seems to mark the farthest advance which man has yet made in his penetration of the secrets of nature. Although the matter is now an old story, we cannot get over our first impression, that there is something supernatural in this Promethean theft of the light of heaven. To convert the fleeting reflections of a mirror into substantial pictures—to fix in durable forms the actual image of our friend, seems next only in creative power to duplicating his living and breathing substance. This first great step having been made, and all the outlines, and masses, and delicate gradations of light and shadow that are found in Nature, having been caught and fixed upon the silvered plate, the re-production of the natural colors would seem an addition to the art, much less wonderful and unexpected than the original discovery. We have every reason to believe that this step has at length been taken, and a process discovered, which, in the course of years, will be so improved as to give us a durable image, as perfect in *color* as any we may now obtain in form and chiaro-scuro. Mr. Niépce de Saint-Victor, who was associated with Daguerre in his investigations, has exhibited certain copies from colored lithographs, in which, it is stated, the natural tints of the originals are correctly reproduced. A scientific friend of ours saw these photographs lately in London, and he speaks of them as clearly proving the success of the experiment. The only difficulty was the fleeting character of the colors. It was necessary to inspect them by artificial light, and even then, to expose them as little as possible. We find a detailed account of this discovery in a paper communicated by Robert Hunt to the London Art-Journal, for October. The subject is so important, that we have thought it best to republish it entire.

The name of *Heliochromy*, or sun-coloring, is very appropriately given to a process by which photographic pictures in their natural colors are obtained. The name originally proposed for sun-drawing by M. Niépce, was *Heliography*, which is, in every respect, far preferable to photography, which signifies light-drawing; whereas, we have every reason for believing that these pictures are produced by a principle associated with light, but which gives none, that is, it possesses no illuminating power.

The problem of the production of color upon sensitive tablets, by the action of the radiations from the colored surfaces of natural objects, the colored copy corresponding with the hues of Nature, is now solved. We have previously stated (*Art-Journal*, p. 188) that M. E. Becquerel in Paris, and Mr. Hill in the United States, have succeeded in producing colored pictures by the action of the solar rays upon metallic plates. The former published his process, the latter has not yet done so. Since that time, the nephew of M. Niépce, one of the earliest investigators of this important subject, has circulated specimens of the colored pictures called by him *Heliochromy*, and we have had an opportunity of inspecting several of them—the personal gift of M Niépce de Saint-Victor to Mr. Malone. There is something so exquisitely charming in these

pictures—though the process is still imperfect, and the production of them involves such very important scientific considerations, that we are anxious to embrace the earliest opportunity of putting the readers of the *Art-Journal* in possession of all the facts of the progress of discovery, and such explanations of the process, and of the physical phenomena, as we are in possession of.

Without entering into the discussion which has been carried on for a long period, as to the phenomena of color, it is necessary for the perfect understanding of the results obtained, that the chromatic conditions of a decomposed sunbeam should be clearly appreciated and the relation of this colored image to the chemical effects obtained, distinctly understood. A pencil of light is passed through a prism, and we obtain an elongated image consisting of a beautifully colored set of bands. There are three primaries, red, yellow, and blue, which by intercombination, give rise to other tints, so that altogether we are acquainted with nine colored rays—crimson, red, orange, yellow, green, blue, indigo, violet, and lavender. The colors of natural objects are produced by the decomposition of the rays of light, this being effected by some peculiar *surface* action. Now, if we expose a piece of photographic paper or a daguerreotype plate, to the action of this spectrum, or to the radiations from colored surfaces, we shall find that the chemical effect has no relation to the intensity of light belonging to the colored ray. For example, supposing the colored image of the nine rays to fall upon a sensitive tablet, the result is of the following curious character:—One of the red rays protects the paper from all change the other usually makes a *red* impression; the orange and yellow rays have no chemical action, though these have the most illuminating power. The chemical action commences in the green ray, rapidly increases in energy in the blue, and exerts its maximum power over the space covered by the indigo, violet, and lavender, still continuing with much energy over a space beyond the lavender, in which no light can be detected. It was upon the consideration of these peculiarities—clearly proving that ordinarily there was a remarkable want of agreement between the actinic power of sunbeam, and the chromatic phenomena depending upon it, that M. Biot wrote the following passage:—

"Substances of the same tint, may present, in the quantity or the nature of the radiations which they reflect, as many diversities, or diversities of the same order, as substances of a different tint; inversely, they may be similar in their property of reflecting chemical radiations when they are dissimilar to the eye; so that the difference of tint which they present to the eye may entirely disappear in the chemical picture. These are difficulties inherent in the formation of photographic pictures, and they show, I think, evidently, the illusion of the experimenters who hope to reconcile, not only the intensity, but the tints of the chemical impressions produced by radiation, with the colors of the objects from which these rays emanate."

These were the natural suggestions of the mind when merely considering the ordinary phenomena of the chemical action of the solar spectrum. But, had M. Biot been himself an experimenter in photography, it is scarcely to be supposed that a man of his acute mind would have taken so limited a view of the phenomena as is involved in the above considerations. Color is the result of a peculiar condition of the *surface*, and if the different rays produce a dissimilar molecular or chemical change, there is no reason why the result should not be the production of chromatic impressions. The yellow rays produce a small amount of chemical action, but that may result in such a molecular arrangement as will determine the reflection of yellow light, and so of the other rays. In fact, in 1840, Sir John Herschel published an account of some experiments in which the production of color was very evident, and on paper prepared with a brown vegetable juice he obtained an impression of the spectrum colored from end to end, the color of each ray being impressed in the natural order.

Subsequently, Sir John Herschel wrote; "I have got specimens of paper, *long kept*, which give a considerably better representation of the spectrum in its natural colors, than I had obtained at the date of my paper (Feb. 1840), and that *light* on a *dark ground*, but at present I am not prepared to say that this will prove an available process for colored photographs, though it brings the hope nearer." In April, 1840, the author of these papers in a memoir, entitled "Experiments and Observations on Light, which has permeated colored media," described some curious results obtained on those photographs which are prepared with the hydriotic salts, exposed to luminous influence with colored fluids superposed; permitting, as distinctly isolated as possible, the permeation of the violet and blue, the green, the yellow and the red rays—under each of these a complementary color was induced. In January, 1841, the author prepared some papers with the bichromate of potash and a very weak solution of nitrate of silver; a piece of this paper was exposed behind four colored glasses, which admitted the passage respectively of, 1st, the violet, indigo, and blue rays; 2d, the blue, green, and a portion of the yellow rays; 3d, the green, yellow, and orange rays, and 4th, the orange and red rays. The weather being extremely foggy, the arrangement was unattended to for two days, being allowed to lie upon a table opposite a window, having a southern aspect. On examining it, it had, under the respective colors, become *tinted* of a blue, a green and red, while beneath the yellow glass the change was uncertain, from the peculiar color of the paper. These results were obtained without a gleam of sunshine. In the "Researches on Light," will be found several other experiments, particularly some of the fluoride of silver, which sufficiently showed the production of colored photographs to be within the limits of probability. To Mr. Edmond Becquerel is however certainly due the discovery of the mode of preparing a metallic plate in such a manner as to produce a tablet susceptible of chromatic impressions. This was effected by the young French experimentalist about two years since: his process consisting essentially in the formation of chloride of silver, or probably of a subchloride, upon a metal plate. In the camera-obscura, highly colored images were copied, and the copies gave colors of a natural character. In this way, however, only large masses of color, as the colors of a geographical map, were copied, and impressions of the spectrum obtained. By, far the most important investigation has been carried out by M. Niépce de Saint-Victor, an abstract of whose *Mémoire* we hasten to communicate to the readers of the *Art-Journal*.

The memoir is entitled, "Upon the relation existing between the colors of certain colored flames, with the Heliographic images colored by light."

When a plate of silver is plunged into a solution of sulphate of copper and chloride of sodium, at the same time that it is rendered *Electro-positive* by means of the voltaic battery, the chloride formed becomes susceptible of coloration, when having been withdrawn from the bath, it receives the influence of light. This was the discovery of M. Edmond Becquerel: M. Saint-Victor had been led to think that a relation existed between the color communicated by a body to a flame, and the color developed upon a plate of silver, which should have been chloridated with the body which colors this flame.

The bath in which the plate of silver was plunged, was formed of water saturated with chlorine, to which was added a chloride possessing the property of coloring flame.

It is well known that strontian gives a *purple* color to flames in general, and to that of alcohol in particular. If we prepare a plate of silver and pass it into water saturated with chlorine, to which is added some chloride of strontian, and when thus prepared we place *upon it* a colored design, of red and other colors, and then expose it to the sunshine, after six or seven minutes we shall perceive that the colors of the image are reproduced upon the plate, but the reds much more decidedly than the others. When we would produce successfully the other rays of the solar spectrum, we operate in the same manner as we have indicated for the red ray, employing for the *orange* the chloride of calcium, or that of uranium for the *yellow*, or hypochlorite of soda, or the chlorides of sodium and potassium. If we plunge a plate of silver in the chlorine liquid, or if we expose the plate to the vapor we obtain all the colors by the light, but the yellow only with any degree of veracity. Very fine yellows have been obtained with a bath composed of water slightly acidulated with muriatic acid with a salt of copper.

The green rays are obtained with boracic acid or the chloride of nickel; also with all the salts of copper.

The blue rays are obtained with the double chloride of copper and ammonia. Indigo rays are obtained with the same substance.

The violet rays are obtained with the chloride of strontian and the sulphate of copper.

All the substances which give colored flames give also colored images by the light. If we take any of the substances which do not give color to flame, we do not obtain colored images by the light; we produce upon the plate a negative image, composed merely of black and white as in the ordinary photographs. Those substances which give white flames, as the chloride of antimony, the chlorate of lead, and the chloride of zinc, yield no color by luminous action. All the colors of the picture have been produced by preparing a bath composed of the deuto-chloride of copper; and Niépce states that this salt, thrown into burning alcohol, produces a variegated flame, according to the intensity of the fire; and it is nearly the same with all the salts of copper mixed with chlorine.

"If," says Niépce de Saint-Victor, "we put a salt of copper in liquid chlorine, we obtain a very sensitive surface by a single immersion; but the result of this mixture is seldom good. I prefer taking the deuto-chloride of copper, to which I add three or four pounds of water—this bath gives very good results. I prefer, however, a mixture of equal parts of chloride of copper and of chloride of iron, with three or four parts of water: the chloride of iron has, as those of copper, the property of being impressed on the plate of silver, and of producing many colors, but they are infinitely more feeble, and the yellow always predominates, and this agrees with the yellow color produced in flame produced by the chloride of iron."

If we form a bath composed of all the substances which separately give a dominant color, we obtain very lively colors; but the great difficulty is the mixing in proper proportions, for it happens nearly always that some colors are found excluded by others. By care, however, we ought to arrive at the reproduction of all the colors. There exist many difficulties, more indeed than in any of the ordinary processes of photography. We cannot always depend upon obtaining the same results with the same materials, owing principally to the difficulty of preserving the solution at a uniform strength. Liquid chlorine is necessary; the application of dry chlorine will not produce the same result. The action of heat upon these prepared plates is, in some respects, analogous to the effects of light. By warming a plate over a spirit-lamp we produce successfully the following tints—brown red; a cerise red; scarlet; and red having a whitish tint.

Numerous experiments have been made by Saint-Victor to produce the colors upon the salts of silver and copper spread on paper, but hitherto without success; a metallic plate of silver—the plated copper answers—must be employed.

Iodine and bromine, and their salts, have been tried, but they will not produce a surface capable of developing colors. Chlorine, in the state of

chlorates or chlorides, is the only substance which possesses the property of being colored by light, when chemically combined with metallic silver.

The mode of operating recommended is, to form a bath with one-fourth by weight of the chloride, and three-fourths of water. When the muriatic acid is used with a salt of copper, we must add one-tenth of water. When the bath is composed of several substances, it is essential to filter the solution carefully, so as to obtain very transparent solutions, and it must be preserved in a well stoppered bottle.

The quantity necessary to prepare two or more plates should always be taken, because the bath is weakened considerably at each operation; it can, however, be rendered active by the addition of a few drops of muriatic acid.

The purer the silver employed, the more perfect is the impression, and the more intense the colors.

The plate being very highly polished, which is best effected by tripoli powder and ammonia, is connected with the battery and then plunged into the bath, and kept there for some minutes; it is then taken from the bath, washed in a large quantity of water, and dried over a spirit-lamp. The surface thus produced is a dull neutral tint, often almost black, and upon exposing it to the light, the colors are produced by removing the blackness; the surface is, in fact, *eaten out in colors*. The sensibility of the plate appears to be increased by the action of heat, and when brought by the spirit-lamp to the cerise red color, it is in its most sensitive state. At present, however, the plates cannot be rendered very sensitive, two or three hours being required to produce a decided effect in the camera-obscura. It is, however, already found that the fluoride of sodium will very much accelerate the operation.

The fixation of the colored image is, however, still a point of considerable difficulty, and although a certain degree of permanence has been recovered, the colors fade out by exposure, and eventually pass away. A kind of lacquer appears to have been applied to the plates we have seen, and ordinary diffused light does not seem to produce much change upon them.

Such is an outline of the researches of M. Niépce de Saint-Victor, as communicated by him to the Academy of Sciences—he is still zealously occupied in the inquiry, and we hope very shortly to be enabled to communicate some yet more important results. The problem is, however, solved; we can produce pictures by the agency of the solar beam in natural colors; that principle which gives to the exterior creation the charm of color, will so regulate the chemical agency of the actinic power with which it is associated, that, on properly prepared surfaces, the images are painted in their native hues. The heliochromes will, we have no doubt, in a short time enable the artist to catch the ever-varying tints of nature, and preserve them as studies. This is certainly one of the greatest steps made in photography. ROBERT HUNT.

We have frequently called the attention of the public to the experiments in *heliochromy*, which the Rev. Mr. HILL, of this state, is now making. We hoped to announce before this the public exhibition of some of the results obtained by this gentleman. The only account of them we have seen besides the letter from Mr. HILL, which we published in part in a former number, is contained in the following, which we extract from *The Daguerrian Journal*, and which was written by its editor, Mr. HUMPHREYS:

We had hoped that ere this we should have had something more encouraging and satisfactory in relation to the *Hillotype*.

It is our duty to our friends, as well as for the public interest, that we, so far as we are able, now give an impartial view of the present position of Mr. HILL's process. From what we know we cannot see that Mr. H. has advanced a single step for the last six months. The specimens we have examined lead us to believe that Mr. H. finds it difficult to make the same "*Singular Compound*" with which he claims to have taken his most flattering results.

We do not wish, nor would we endeavor, to depreciate the merit of Mr. HILL's alleged discovery. So far as relates to his having the natural colors, we do not feel inclined to deny; and, if the colors we have seen are truly the colors of nature, then Mr. HILL is entitled to the honor of a discovery. We can only give the reader the facts in relation to what we and others have seen, and leave him to draw his own conclusion.

On the 19th of Sept. we received a letter from Mr. HILL: (as he has alluded to it in one dated on the 11th inst. which may hereafter appear in this Journal) we make only an extract which he refers to. In speaking of showing us some of his results, he says, "enough to convince you of my having the colors." This letter was received in the evening, and we made preparations to take the earliest conveyance for his residence, where we arrived twenty-four hours after receiving it. We found several who are interested in the Daguerreotype Art at his house: most of whom have seen some of his experiments, and are at liberty to speak of them in any way they see fit. The specimens we saw were taken from prints (principally French colored lithographs), without the aid of the camera; and one circumstance goes to show that they were not transfers, as they are not equal to a very ordinary one.

There were colors, and we are unable to decide whether they are the results of some species of transfers merely, or some other action; yet we feel confident they were never applied by the brush. Some of the plates had a predominating color which was extended beyond its *proper locality*, by appearing over nearly all the surface of the plate. We did not see clear *blue*, or *yellow*: of any tint, the *red* and *purple* appear the most common, while *green* is very indistinct —wanting much in brilliancy.

We saw a copy of a colored lithograph, representing a figure of an Indian. This impression was on a full plate, and the *red* predominated: it being distinct all over the background, and at other points out of its proper locality. On the shadowed portions of the picture the red was brightest, yet not at all brilliant; in the lights, it assumed more of a pink. On this impression was some ribbon of very dark green, so dark and dull that it required close examination to determine the color. On the head of the figure was a chief's cap of feathers, which were quite red.

Another impression represented two birds. This plate had a back ground of purple or red hue. There were several other impressions with but faint colors, "scummy," and very indistinct, resembling in point of distinctness a Daguerreotype impression developed only in parts, as is the case when the plate has received a coating with an excess of bromine.

We also saw an impression of a rose bush, which had the green a little more distinct than any other of the numerous specimens; it was very dark, yet located in its proper place. On the buds of this bush there were blossoms tinged with light pink and purple, the background was of a grayish tint. This specimen, in connection with one of a Tiger lily, were the only ones that present any thing like even faint apologies for copies. The lily had a greenish stem, while the blossom was purple, with a number of spots, and at the mouth of the blossom, where properly should have been blue or violet, it was gray. Of these two last we cannot say the colors were brilliant, but they were, so far as developed, in their respective localities.

To our knowledge we saw no picture that was taken by the aid of the camera. Mr. HILL exhibited to three gentlemen a picture which he said was taken by the camera; it was of a Bishop, copied from a lithograph. This picture did not present as favorable an impression as many others.

The specimens we saw were upon metallic plates, and resemble a varnished *papier mache* case. They appear to have on their surface a substance somewhat resembling varnish. We saw Mr. H. buff on one of LEWIS' wheels a plate with an impression upon it; he occupied time and weight sufficient to buff a full plate for an ordinary Daguerreotype. The result was, the plate received no scratch or other mark, but it served, rather than otherwise, to brighten the appearance of the picture, by polishing the varnish-like surface. Mr. H. by the aid of some chemical action, in the presence of some gentlemen who saw his results, took off, almost instantly, this outer coating, and the plate was rendered like a new one, equally sensitive for any other impression. This induced us to believe that the outer coating is nothing more than some kind of varnish: and the fact that polishing the surface renders the impression brighter, which can be noticed when it has stood but a few seconds, leads us to fear that it is liable to be injured by exposure to the atmosphere. Again, while it is so susceptible to removal by a chemical agent, possessing only that energy of action which will admit of its being applied to the surface of the plate by a small tuft of cotton held in the naked hand, we are inclined to think that it cannot be any thing like an enamelled surface.

From the fact that to our knowledge we did not see a single specimen taken from nature, neither by the camera or other means; also that we *could not* see the engravings from which the specimens presented were taken, we were induced to urge, with calmness and persuasion, for other and more satisfactory proof, or something to convince us that the Daguerreotype was in any way likely to be superseded by Mr. HILL's process. This proof we have not had, further than Mr. HILL's own assertion, which we must say we *do not feel warranted to discredit*.

Mr. HILL claims to have some superior specimens, and his description of them is expressive and beautiful. This assertion we cannot deny, but we have never heard of any one who has seen them.

The following gentlemen have seen Mr. HILL's experiments:—J. Gurney, C. C. Harrison, A. Morand. C. W. Meade, and S. Holmes, of New-York; M. Shew, of Philadelphia; C. E. Johnson, of Cleveland, O.; C. L'Hommedieu, of Charleston, S. C.; R. E. Churchill, of Albany, and several others whose names we do not know.

THE CHRONICLE.

ART AND ARTISTS IN AMERICA.

LEUTZE'S WASHINGTON.—Before the present number of our Journal shall be published, the exhibition of this picture will have been opened, and the admiration it has already excited among the few who have seen it, confirmed and justified by the verdict of the people at large. It is the approbation of this class which the artist most ardently desires—the praise of the great body of citizens, uninstructed in the technicalities of the school, but fully able to sympathize with and appreciate the noble qualities of courage and patriotism which he has sought to embody in his work. "I want to know what the 'boys' will say of it," was his expressive remark to a friend. There was a great deal of philosophy in this sportive speech. Why is not the opinion of the less instructed classes a good test of the higher merits of a great national picture? The chief object sought in such a work is to present in the most powerful and intelligible form the ideas and circumstances that make up some momentous historical fact. The successful treatment of such a work depends, of course, to a great extent, upon technical ability, but still more upon those qualities which a painter has in common with a